

# Application of rapid qualitative methods in difficult conditions of an epidemic with emphasis on conceptual framework

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## Abstract

**Background:** The world today is fraught with numerous perils, particularly due to frequent epidemics that inordinately impact people's lives. Given such ongoing global crises, universities need to take into account the challenges that their research activities may encounter. Therefore, we aimed to conduct a thorough and rapid study of the causes and consequences of emergencies to overcome the methodological challenges that such crises impose.

**Methods:** A literature review.

**Results:** The effects of these social and epidemiological complications on academic and research practices have made scholars adapt their research approaches to the challenging and restrictive conditions of emerging societies in the postmodern epidemic and risk society. This has accentuated the importance of innovative approaches like team-based qualitative research.

**Conclusion:** This research introduces a team-based, rapid qualitative approach to deliver timely, useful, and pertinent findings. It accentuates the feasibility of employing swift and urgent methods in challenging epidemic settings.

## Introduction

In the 17th and 18th centuries, early modern societies confronted numerous threats, such as adverse weather conditions that can result in the devastation of crops and the spread of uncontrollable diseases. These were phenomena beyond human control. Despite advancements in medical knowledge and technology following industrialization, risks did not significantly decrease. Losses became mostly man-made, instead. Nowadays, many news and media outlets focus on the detrimental effects of various chemicals, specific foods, climate changes, and other threats that impact the global population.

Unlike historical threats that were often class-based, modern risks, such as smog, are democratically distributed, impacting everyone.<sup>1,2</sup>

It is crystal clear that the world is fraught with hazards, threats, and crises emerging in rapid succession. These hazards significantly impact people's lives, as evidenced by the frequency of disasters and emergencies.<sup>3</sup> Living in a risk-heavy society necessitates proper preparation, and individuals must possess a high level of acuity and be skilled collaborators to effectively address emergencies.

Failure to do so can incur dire consequences. Numerous researchers have emphasized the importance of evolving research methodologies to address these chaotic conditions and enhance our understanding of them.<sup>4</sup>

Wolbers et al provide an overview of the primary centers, methods, and research plans used in the field of crisis and disaster research from 2001 to 2020.<sup>5</sup> They note that the focus and methods used have remained relatively unchanged over time, with case studies and exploratory research being the dominant approaches. While the focus has shifted from preparedness to response, there has been limited methodological diversity, though it is gradually increasing. Looking ahead, challenges will include understanding cross-border crisis management and ongoing crises. While the field of crisis and disaster studies has garnered increased attention in the past two decades, with recent global events such as the COVID-19 pandemic, this attention should be considered all the more significant.

The COVID-19 pandemic has not only had physical and clinical impacts on people's lives but also significant psychosocial consequences, as highlighted by Teti

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et al study.<sup>6</sup> In the realm of academic research, this has presented both challenges and opportunities for conducting qualitative research in the field of epidemics. Two major challenges have emerged: time limitations and physical distancing, which have led researchers to reflect on how to conduct qualitative research within these evolving limitations. It is crucial to consider these challenges to integrate qualitative findings into policies and practices that shape the current response to the pandemic and future crises.<sup>7</sup>

The COVID-19 pandemic has had a profound impact on academic and research activities.<sup>8,9</sup> The pandemic has mandated academic institutions worldwide to adopt measures such as social distancing, working remotely, and quarantines, which have posed significant challenges for graduate students at the master's and doctoral levels.<sup>10</sup> These challenges have disrupted research timelines, limited access to data and participants, and hindered face-to-face interactions crucial for qualitative research. As such, it is essential to acknowledge and address these challenges to ensure that qualitative research can continue to inform policies and practices during the pandemic and beyond.<sup>10</sup>

The COVID-19 pandemic has brought about significant challenges for research activities, including the adoption of new methodological strategies and the integration of information and communication technology (ICT) in research processes and the highlighted importance of quick and comprehensive reviews of literature.<sup>11,12</sup> These changes have sparked debates regarding epistemological and methodological approaches in social sciences, highlighting the need to explore new research methods that can effectively address the impact of the pandemic. As such, it is crucial to consider how these challenges can be overcome to ensure that research continues to inform policies and practices during and beyond the pandemic.

These challenges include ensuring a balance between speed and rigor, meeting ethical considerations, and maintaining data quality despite disruptions in research processes. To overcome these challenges, researchers must be adaptable and innovative in their approach to research, utilizing technology to facilitate remote data collection and analysis, and collaborating across disciplines to develop new methodologies that can effectively address the impact of the pandemic. Additionally, researchers must engage with stakeholders, including policymakers and community members, to ensure that their research is relevant and useful in informing decisions that can mitigate the impact of the pandemic. Overall, the COVID-19 pandemic has highlighted the need for flexibility, innovation, and collaboration in research, and researchers must adapt to these changes to ensure that their work continues to inform policies and practices during and beyond the pandemic.<sup>13</sup>

There is a challenge in reconciling the speed of innovation with the traditional methods of research and

evaluation, particularly in healthcare. To address this challenge, new tools and methodologies are needed that allow for rapid communication with stakeholders while still maintaining methodological accuracy.<sup>14</sup>

Qualitative research can be particularly useful for healthcare researchers who need to inform policy and practice changes promptly. This is especially important given external factors such as budget cuts and public policies that can impact healthcare priorities. Therefore, timely sharing of research findings is crucial for their effective use in healthcare decision-making.<sup>15</sup> There has been a growing demand from health technology assessment (HTA) commissions to conduct reviews faster and more efficiently. Although there is no definitive definition of "rapid reviews" (RRs) in the theoretical literature, they can generally be described as reviews that can be completed more quickly than standard systematic reviews. There is no one-size-fits-all approach to conducting a quick review, as methodological changes can take many forms, such as team roles, literature search strategies, inclusion and exclusion criteria, data extraction methods, and data synthesis methods.<sup>16</sup> Rapid qualitative research (RQI) can be conducted even in difficult conditions like an epidemic or pandemic and can generate timely relevant findings.<sup>17</sup>

The current research seeks to explore the significance of rapid qualitative methods in addressing the challenges of mixed conditions. Specifically, it will investigate the types of approaches, features, techniques, and strategies associated with this method. By doing so, it will provide valuable insights into how this method can be used to effectively address the complexities of mixed conditions.

### Conceptual Framework

The human race has made remarkable progress by harnessing the power of technology to overcome the challenges of nature. However, this progress has led us to the Industrial Revolution and beyond, where the pace of innovation has accelerated. As we journey towards a future of progress and development, we must be mindful of the risks that come with this speed. The few bumps on the road of modernity may seem insignificant to us, but we must remember that sometimes this train of happiness can spiral out of control. It can become a force of negative modernity, crushing everything in its path like an Indian juggernaut. This can create a risky society, where crises and epidemics spread rapidly, as seen in the current COVID-19 pandemic. Therefore, we must be cautious and ensure that our pursuit of progress is tempered by responsible decision-making and a commitment to safeguarding the well-being of all members of society. The Giddensian ontological insecurity that plagues all humans has caused this train of hope to turn into a train of despair. The rapid advancement of technology has caused boundaries to collapse, placing people in the Paul Virilio's dromological situation, where everything is in a race—even the stakes. Therefore, to cope with this chaotic

situation, escape this iron cage of risks, and assume the role of Bauman's gardener, one must act with Virilian speed by conducting quick team studies and collaborative research that keeps up with the rapid changes in risks' causes and effects. This crushing force addressed the hazards and epidemics, preserving Virilian inner culture and Habermasian biocolonization. To assess such severe crises and epidemics and offer remedies, methodological revolutions evolved exactly in this context accurately and thoroughly. Pragmatism and neo-pragmatism were among them.

Pragmatism underscores epistemological pluralism and values the integration of different and even conflicting theories, approaches, and methods that lead to coherent and accurate outcomes. All observations, experiences, tests, and data are considered in this approach, where their effectiveness is evaluated as a crucial way of understanding life's world. The pragmatic method offers a percentage-based comparison of presenting methodological alternatives, leading to practical theories.<sup>18</sup>

According to the perspective discussed in utilizing multiple methods of data collection is encouraged among researchers to address research questions and adopt a pluralistic approach. On the other hand, neo-pragmatism methodology differs from classical pragmatism in that it leans towards the study of linguistics.<sup>19</sup>

In classical pragmatism, language and verbal structures are seen as a means to acquire knowledge that replaces reason and sense. This approach tends to activate the element of creativity rather than the element of rationality in research because of its role-playing method. However, the results of such research may be trivial, making it difficult to apply them to the structuring of the social world. These interpretations suggest that pragmatism is not a complete worldview, but rather a method of rethinking ideas, with its main objective being to clarify concepts according to Charles Peirce.<sup>20</sup>

Rorty, as a neo-pragmatist, employs a historical approach that critiques the Enlightenment's ideal of rationality in the Western world and strives for a language that meets our needs. He believes that any research should prioritize personal self-creation and improving community solidarity, even if it means sacrificing the search for objectivity in the process.<sup>21</sup> Thus, there is potential to expand this methodological approach to fast-paced, team-based qualitative research. While reflexivity is commonly recognized as a fundamental aspect of qualitative research, it is less frequently incorporated into team-based and rapid approaches. Given the rising significance of collaborative work and efficient qualitative methodologies in today's research landscape, it is crucial to address the gap in the literature concerning reflective team-based methods. Therefore, introducing researchers as a potential solution to such research in our current volatile world would be beneficial.

### Rapid qualitative research

Qualitative research offers an in-depth and interpretative understanding of the social world of the research subjects. However, there is no consensus on the meaning of the word "rapid" in this context. Some authors suggest that rapid studies can take anywhere from 4-8 weeks, 90 days, or from a few days to 6 months.<sup>17</sup> RQI typically employs a team-based approach to minimize time constraints. Qualitative research can provide rich data and is especially useful when seeking to comprehend the implementation of complex interventions in actual settings.<sup>22</sup> Over the years, qualitative research has been viewed as a time-consuming approach to collecting and analyzing data. However, researchers are now constantly seeking means to produce timely results to enable the use of qualitative data in various interdisciplinary settings. Recent advances like rapid assessment methods, rapid ethnography, and short-term ethnographies have facilitated faster data collection and analysis. Researchers combine a team of experts who utilize multiple data triangulation methods for efficient iterative processes in collecting and analyzing data to reduce research time.<sup>15,23-25</sup> Apart from the mentioned methods, researchers have also formulated methodologies to reduce the duration needed for the compilation and evaluation of qualitative data. These techniques may include shortening the time spent in transcribing interviews or merging data analysis techniques with data accumulation. Real-time demonstration of outcomes is one such technique that has been incorporated in both short-term and long-term studies to hasten specific research facets. Although there are numerous swift qualitative research techniques accessible, a comprehensive synthesis and critical evaluation of these approaches are still to be undertaken.<sup>26</sup> According to Grant and Booth, a rapid review is a type of assessment that utilizes systematic review methods to evaluate existing research on a particular policy or practice issue.<sup>27</sup> Unlike other types of reviews, it is completed within limited time constraints and commonly presents its findings in a narrative and tabular format. Additionally, a rapid review examines the quality and direction of the available literature's conclusions concerning the topic at hand.<sup>28</sup> In the realm of dynamic systems like health care delivery, qualitative methods are deemed the most suitable for informing and guiding intervention adaptations. Implementation science efforts that overlook qualitative methods aim at comprehending the underlying mechanics of successful healthcare reform that leads to elements such as acceptability and feasibility. Alteration concentrates evaluation exertions on providing insight into subsequent steps associated with expansion, scaling, and/or customization to better conform to the situation.<sup>14</sup>

Mind mapping techniques can improve research accuracy by allowing participants to cross-check

interpretations in real time while creating mind maps. Some reviewed articles discussed the purpose of rapid study methods beyond the objectives of the original study, and research findings were used to demonstrate the reliability and systematic nature of rapid data analysis methods. There were two general themes on how conventional methods were best adapted to rapid time frames: (a) elimination of creativity-transcription or (b) speeding up the process of creating transcripts. Qualitative researchers adopting long-term and “write-only” models integrated reflection into the research process. However, those engaged in other types of qualitative research, particularly team-based approaches, face challenges in incorporating reflection meaningfully. Rapid team-based qualitative approaches like rapid assessment procedures (RAPs) and RQI are defined concerning teamwork. The use of team-based approaches expanded the breadth and depth of data collected, as multiple researchers can cover more ground and divide the workload among themselves. In addition, team members with different expertise and perspectives can participate in a continuous process of multi-viewing, so that data from various viewpoints are interpreted continuously.

It should be noted that qualitative research has been criticized for its lack of generalizability due to small sample sizes. However, such criticism assumes that qualitative studies have the same purpose and measure the same outcomes as their quantitative counterparts, which is not the case according to Carroll. In HTA, for example, qualitative evidence seeks to identify patients' experiences concerning living with a health condition and their experiences and expectations of the health technology being studied. This knowledge is then used to develop informed recommendations. Qualitative research does not aim to measure efficacy or safety. Instead, it aims to explain and identify patients' experiences, preferences, and behaviors, which quantitative evidence may sometimes fail to consider. Qualitative methods utilized to inform quantitative studies include interviews, clinical field observations combined with interviews, and the nominal group technique. The nominal group technique is a structured multistage facilitated group meeting technique that prioritizes responses to a specific question.<sup>29</sup>

### **Characteristics and approaches of rapid qualitative research**

According to Vindrola-Padros and Johnson, the field of RQI has a lengthy history in the social sciences.<sup>30</sup> It stems from the movement to involve local communities in identifying their needs, as advocated by McNall and Foster-Fishman.<sup>23</sup> RQI has since expanded into the fields of public health and social sciences, as noted by Richardson et al.<sup>31</sup> There are numerous forms of rapid research, with over 15 distinct approaches outlined by

researchers.<sup>31</sup> The diverse approaches also result in varying definitions, depending on the type of rapid approach. The field of RQI encompasses different approaches developed by researchers, such as rapid ethnographic assessments, RAPs, rapid response assessment and measurement, RQI, rapid ethnographies (e.g., rapid, focused, and short-term ethnographies), and rapid assessments. McNall and Foster Fishman provide a general definition of all rapid assessment and evaluation methods (REAM) and argue that these approaches share common features, including (a) conducting the study within a short time frame (weeks or months), (b) involving participants in the study design process, (c) combining multiple research methods and multimodal data during analysis, and (d) ensuring replicability, in which data collection and analysis occur simultaneously, and emerging findings shape the data collection process.

RQI is also defined as “Intensive and team-based qualitative investigation with features such as (a) focusing on the perspective of looking from within or emic, (b) use of multiple sources and multifaceted approach, and (c) using iterative data analysis and additional data collection to quickly develop an initial understanding of a situation”.<sup>32,33</sup> However, there are important variants of this approach that can be obtained by reviewing multiple articles such as:

1. Team-based reflexive model: which involves a rapid qualitative assessment of the experiences of the informants and those involved in a particular situation. The team's actions can be grouped into four dimensions, including design assumptions, data collection and analysis processes, multidisciplinary collaboration, and responsible publishing.<sup>34</sup>
2. Lightning Reports: a special format for reporting lightning results. The Blitz reporting method consists of three basic steps: pre-planning, data collection and synthesis, and report generation, and communication.<sup>14</sup>
3. Qualitative evidence synthesis: a process in which researchers systematically review and synthesize evidence from individual qualitative studies on a topic of interest to compare and analyze concepts and findings to create a new understanding.<sup>16</sup>
4. Expedited reviews: a type of review that can be completed faster than a standard systematic review.<sup>35</sup>

Despite the common characteristics of RQI, different approaches may be more suitable for specific research questions or contexts.

### **Techniques and strategies**

The proposed methods in rapid qualitative approaches aim to reduce the time required for collecting and analyzing qualitative data. While they are typically used in rapid studies, they can also be applied to long-term studies to expedite specific research aspects. Each method utilizes



a series of strategies and techniques that researchers have developed. Although there are slight variations between them, the core strategies and techniques are consistent across all methods.

The following are the most important steps for conducting RQI:

1. Forming a team: To undertake RQI, it is crucial to form a team of multidisciplinary experts.
2. Browsing and searching for sources: The team should browse all the available sources on the subject while considering two criteria - inclusion and exclusion. Based on these criteria, the team should determine which sources to include and which to exclude. Criteria may vary depending on the research method and topic.
3. Collecting data: A group of researchers should collect relevant data using different methods, such as interviews, reviewing sources, voice recordings, and more.
4. Critical appraisal: seeks to assess the accuracy and dependability of a research study and its discoveries.

However, evaluating qualitative studies critically is not always straightforward. Due to the philosophical and epistemological differences in qualitative research, there is no agreement among qualitative researchers about how to assess qualitative research evaluation in terms of importance and practical use. A fundamental principle for using a structured critical appraisal tool is to understand the methodological strengths and limitations of primary studies and how these limitations reflect at the review findings level so that it can be used as a reference for improvement.

5. Quality Reporting Tool includes a concise set of criteria that are widely applicable in qualitative studies and more practical than lengthy checklists. As a result, it may be more appropriate for a rapid synthesis approach, particularly because it covers the purpose of the study, its plan, sampling strategies, and details on data collection and analysis methods.
  - a. Description of the purpose of the study
  - b. Description of the study plan
  - c. Sampling strategies
  - d. Report on data collection and analysis methods
6. Data analysis: In this step, you will systematically apply the qualitative evidence synthesis framework to the results, discussion, and conclusion sections of all studies that are included in the synthesis. The coding framework will guide you to identify topic-related data from these studies. The data for each category can be extracted through multiple iteration cycles toward theoretical saturation.
7. Data synthesis: Analysis involves looking for patterns and themes, such as emerging trends from the findings.
8. Rapid release of findings: Qualitative research can

quickly operationalize findings in emergencies. This means that it is not necessary to wait for scientific publications in journals or magazines. Instead, findings can be published on social networks, virtual spaces, etc. This facilitates taking findings into account in policymaking and planning while increasing public awareness about the problem.

### Examples of techniques used in rapid qualitative research in epidemics

In a study titled "Rapid Review of Gender-Based Violence and Natural Disasters," Lee utilized a rapid review method to examine the relationship between violence against women and girls (VAWG) and natural disasters.<sup>28</sup> The study used a combination of literature reviews, case studies, reports, and gray literature to identify gaps in current research. Lee's analysis included a narrative analysis of sources that describe changes in the prevalence of VAWG, including gender-based sexual violence, intimate partner violence, physical violence, human trafficking, and psychological violence in post-disaster settings. The main aim of the research was to conduct a rapid review of studies on VAWG following natural disasters worldwide and assess the quantity and quality of research conducted on this topic.<sup>28</sup> The results indicate that most of the sources state an increase in VAWG after natural disasters, while only a few mention a decrease in VAWG after such events. This suggests a potential correlation between VAWG and natural disasters. However, only five sources provide statistics on the prevalence of VAWG before and after natural disasters, while most sources offer data on either pre- or post-disaster violence, but rarely both. Due to the lack of pre- and post-disaster data, the sources have limited statistical evidence to support the assertion that VAWG often increases after natural disasters. This scarcity of statistical evidence might be why VAWG is still considered a hidden consequence of natural disasters in numerous countries.<sup>36</sup>

In their article, Brown-Johnson et al. shed light on the challenge of keeping up with the rapid pace of healthcare innovation and the needs of healthcare providers.<sup>14</sup> They introduced a new qualitative approach called the lightning report method, which is designed to provide a quick and effective evaluation of healthcare implementation and practical clinical trials. The Lightning Report Method is a type of RAP that differs from other RAP approaches in that it includes a specific format for reporting results. The Lightning Report Method consists of three basic steps: pre-planning, data collection and synthesis, and report creation and communication. The pre-planning stage involves identifying the key questions to be answered and developing a plan for data collection. The data collection and synthesis stage involves collecting data from various sources, such as interviews, surveys, and existing literature, and synthesizing the data into meaningful insights.

Finally, the report creation and communication stage involve creating a concise and actionable report that can be easily understood by stakeholders. Overall, the lightning report method offers a promising solution to the challenge of evaluating healthcare innovation in a timely and effective manner. By facilitating a structured approach for collecting and analyzing data, healthcare providers are empowered to make well-informed decisions regarding the implementation of new technologies and practices. However, it is important to note that the lightning report method is not a one-size-fits-all solution and may need to be adapted to fit the unique needs of different healthcare contexts.

Step 1 of the lightning report method involves pre-planning with embedded subject matter expert partners. This includes drafting data collection protocols for interviews, focus groups, and/or observations based on performance outcomes of interest for each project. The assessment team then distributes these protocols to subject matter experts and healthcare partners and engages in a brief conversation to confirm, adapt, or adjust the protocol as needed.<sup>14</sup>

Step 2: Iterative data collection and rapid synthesis lightning reporting's innovative approach to data collection and synthesis of findings involves using the Plus/Delta/Insight review. This analytical framework includes identifying what works (Plus), what needs to change (Delta), and the insights, ideas, and recommendations of participants or evaluators (Insight).

Step 3: Creating the lightning report ideally, drafts of the lightning report should be created within a few days of data collection.

However, for larger projects such as the Cancer Center Transformation Initiative, reports can be produced regularly every two months. The lightning reporting method's basic framework involves planning in advance with partners, collecting structured data with bookmarks, and creating reports that have an attractive design and are easy to use. This framework is quite flexible and can be adapted to suit other locations and tasks. Finally, it is worth mentioning that the Lightning Report Method and product promise better communication and greater interaction with healthcare partners it is worth noting that many of these approaches depend on a research team, use of multiple data collection methods, multimodality, and repetitive analysis processes to decrease the time spent on research.<sup>15</sup>

This approach is quickly adopted in response to the emergence of epidemics that disrupt the normal life processes of people worldwide. A team of researchers from various fields with different but related expertise comes together to analyze the causes and consequences of the problem scientifically by reviewing sources, collecting data, interpreting, and analyzing it. The aim is to arrive at a suitable and quick solution to solve the problem. Jahani demonstrated the usefulness of such an approach in this

situation. This approach does not prioritize publishing findings in prestigious journals but rather emphasizes prompt intervention during an epidemic process. In today's world, where various types of epidemics are prevalent, individuals familiar with such research can navigate these dangerous health turns effectively. The research aimed to introduce the scientific world of Iran to a rapid and qualitative approach.

## Discussion and Conclusion

The modern world is characterized by a multitude of dangers and threats that can rapidly emerge and severely impact people's lives. Hazards brought on by human activities, which are often global in scope, have replaced concerns about natural calamities like famines and earthquakes. Beck's theory of risk society, as outlined in his seminal work "Risk Society: Towards a New Modernity" (1992), posits that modern societies are characterized by the production and management of risks. He argues that traditional risks associated with natural disasters have been replaced by manufactured risks resulting from human activities. These manufactured risks, such as environmental pollution, technological accidents, and global climate change, have far-reaching consequences for individuals and societies.<sup>37</sup> The recognition of the adverse consequences of modernity on the environment has prompted a reevaluation of safety and security concepts. Traditional notions of safety and security, which focus on protecting individuals from external threats, are no longer sufficient in the face of manufactured risks. Beck argues that these risks are not confined to specific groups or regions but affect all individuals, regardless of their social or economic status. This necessitates a shift towards collective responsibility and global cooperation in addressing and managing these risks.<sup>37</sup>

The outbreak of various epidemics, including the COVID-19 pandemic, has had a profound impact on societies worldwide. This has not only affected individual and social experiences but has also influenced methodological practices and data collection strategies in social research. The crises of the risk society and epidemiological hazards have created numerous theoretical and methodological dilemmas across various industries, such as education, healthcare, treatment services, and human security. This paper aims to explore the impact of the COVID-19 pandemic on methodological practices and data collection strategies in social research.

The COVID-19 pandemic has presented several methodological challenges for social researchers. One of the key challenges is the restriction on face-to-face interactions and physical proximity. Traditional methods of data collection, such as interviews and focus groups, have become difficult to conduct due to social distancing measures. Researchers have had to adapt by utilizing online platforms and virtual communication tools to conduct interviews and collect data remotely.<sup>6</sup>

Another challenge is the disruption of research timelines and the need for rapid-response research. The pandemic has created an urgent need for real-time data to understand the impact of the crisis on individuals and communities. Researchers have had to modify their research designs and adopt more flexible and agile approaches to collect and analyze data promptly.<sup>38</sup>

Furthermore, the pandemic has highlighted the importance of reflexivity in qualitative research. Researchers need to critically reflect on their own biases and assumptions, as well as the impact of the pandemic on their research process and findings. Reflexive thematic analysis, for example, encourages researchers to engage in a reflective dialogue with their data and consider the influence of the pandemic on their interpretations.<sup>38,39</sup>

Hence, it is crucial to reconsider conventional theories and methodologies, particularly due to the critical role of social sciences in comprehending the essence of crises and risks. This includes assessing their impact on various aspects of life, such as economic processes, social support mechanisms, and vulnerable groups within society, among others. In light of this, the advent of the third methodological generation featuring a combination of research methods and supported by post-modern approaches such as pragmatism and neo-pragmatism signifies a shift away from grand narratives towards pluralistic method which enables a multifaceted perspective on crisis-related issues.

During a health emergency, such as the COVID-19 pandemic, it is crucial to have timely access to research findings to inform health policies and practices. Therefore, after conducting rapid research as a team, it is essential to disseminate the research to diverse audiences as quickly as possible. Depending solely on academic journal publications may limit the reach of the findings to a small and specific audience.<sup>34</sup>

In response to the challenges posed by the pandemic, social researchers have employed various strategies. Online surveys and questionnaires have become popular methods for collecting quantitative data remotely. These tools allow researchers to reach a large number of participants and gather data quickly.<sup>40,41</sup>

Based on the above factors, similar to other social areas, carrying out qualitative research during epidemics while maintaining research quality necessitates consistency. RQI initiatives have recently become popular in response to time limitations and the urgency to generate timely responses while maintaining high-quality information for decision-making.<sup>42</sup> In an attempt to accelerate extensive research, the era of epidemics has spurred international cooperation in numerous projects.<sup>7</sup>

Although RQI has gained popularity due to its efficiency in terms of time, this approach has faced criticism for certain aspects that may compromise the quality and reliability of the findings. RQI involves shortcuts in the research process to save time. One of these shortcuts is

the omission of transcription, which is the process of transcribing the exact words spoken by participants during group discussions. Transcription allows for a detailed analysis of the data, capturing nuances and subtleties in participants' language and expressions. By removing this step, RQI interrupts the natural flow of group discussion. Without transcription, researchers may miss important details and fail to fully understand the context and meaning behind participants' statements. Furthermore, the omission of transcription in RQI can be burdensome for both the research team and participants. Transcription requires sufficient time and effort to perform and analyze the data accurately. By skipping this step, researchers may rely on memory or brief notes, which can lead to inaccuracies and biases in data interpretation. Additionally, participants may feel burdened by the rapid pace of the research process, as they may not have sufficient time to fully express their opinions and experiences. This can result in incomplete or superficial data, limiting the depth of understanding and analysis. The shortcuts in RQI may also limit the researcher's interaction and immersion with the participants. In traditional qualitative research, researchers spend significant time in the field, building rapport and establishing trust with participants. This immersion allows for a deeper understanding of the participants' perspectives and experiences. However, RQI may limit the researcher's ability to fully engage with participants, leading to a less comprehensive exploration of complex human and social phenomena.<sup>17,42</sup>

It is also noteworthy that one advantage of the COVID-19 pandemic on qualitative research is the increased recognition of the value of research. Vindrola-Padros et al argue that the crisis has highlighted the importance of RQI in understanding and responding to the pandemic. The urgency of the situation has led to a greater appreciation for the role of qualitative research in informing policy and practice.<sup>17</sup> Another advantage is the opportunity for innovation in research methods. The pandemic has necessitated the adoption of remote data collection methods, such as online interviews and virtual focus groups. These methods have allowed researchers to continue their work while adhering to social distancing measures. Additionally, the use of digital technologies has facilitated the inclusion of participants who may have been previously excluded due to geographical or logistical constraints.

The first ethical predicament researchers faced was whether to conduct studies during a global pandemic. They had to weigh the potential benefits and harms their research may cause. The pandemic brought about unprecedented challenges and uncertainties, raising concerns about the social responsibility of conducting research. Researchers had to consider the potential risks to participants, such as increased exposure to the virus or psychological distress due to discussing sensitive topics during a crisis. The team of researchers, as highlighted

by Vindrola-Padros et al, engaged in reflective and analytical work to navigate these ethical predicaments. They critically examined the potential benefits and harms of their research and considered the broader societal implications. This reflective process allowed researchers to make informed decisions about whether to proceed with their studies and how to mitigate potential risks.<sup>17,39</sup>

In conclusion, the modern world is indeed characterized by a multitude of dangers and threats that can rapidly emerge and severely impact people's lives. The shift from natural calamities to manufactured risks has led to a reevaluation of safety and security concepts, with anxiety and insecurity becoming integral aspects of modern life. Understanding the nature of these risks and their implications is crucial for developing effective strategies to mitigate their impact and ensure the well-being of individuals and societies. Despite the initial difficulties posed by the pandemic, researchers have also found opportunities for research creativity and implementation. The crisis has obliged researchers to adapt their fields of interest, research plans, and methods to the new conditions. This period has highlighted the importance of flexibility and innovation in qualitative research. Researchers have embraced remote data collection methods, such as online interviews and virtual focus groups, to continue their work while adhering to social distancing measures. These adaptations have opened up new possibilities for including participants who may have been previously excluded due to geographical or logistical constraints. Additionally, the aim is to expose young qualitative researchers to new methods used in the field today, with the hope of building upon successful innovations and strengthening them in the future. This research introduces a team-based rapid qualitative method, highlighting that quick and urgent methods can be employed during challenging epidemic conditions to provide timely, practical, and applicable findings.

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#### Competing Interests

The authors declare no conflict of interests.

#### Ethical Approval

This study did not require ethical approval as it was based solely on previously published material.

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